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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,717	10/22/2003	Jonathan S. Stinson	10527-501001	9775
26161	7590	06/24/2005		
FISH & RICHARDSON PC			EXAMINER	
225 FRANKLIN ST			MORILLO, JANELL COMBS	
BOSTON, MA 02110			ART UNIT	PAPER NUMBER
			1742	

DATE MAILED: 06/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/690,717	STINSON, JONATHAN S.
	<b>Examiner</b>	<b>Art Unit</b>
	Janelle Combs-Morillo	1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 25 May 2005.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,3-33,35,36,41 and 44-59 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 12,28,29,35,36 and 48-50 is/are allowed.
- 6) Claim(s) 1,3-11, 13-27, 30-33,41,44-47,51-59 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date: _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date: _____  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 30, 31, 35, are 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Instant claims 30, 31, 35, 36 mention “the first element”, which lacks antecedent basis.

The examiner suggests replacing “the first element” with Pt.

Appropriate correction is required.

### ***Claim Objections***

4. Claim 36 is objected to because of the following informalities: claim 36, which contains the open phrase “includes”, is dependent on claim 35, which contains the phrase “consisting essentially of”. The examiner suggests changing “includes” to “consisting essentially of” type claim language. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 4, 5, 14-23 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 2000-104141 (JP'141).

JP'141 teaches a Pt based alloy excellent in corrosion resistance and biocompatibility, and used for jewelry as well as in the medical field, especially in the field of dental prostheses (see translation, [0001]). JP'141 teaches the biological toxicity is eliminated due to presence of Pt (see Derwent abstract), and said alloy can be (generally) used in embedding in the human body (see Derwent abstract). JP'141 teaches alloys within the presently claimed ranges of Pt, Cr, and Fe (see Table 1 of JP'141, said examples will herein be referred to as ex 4, ex 5, ex 6):

	at%	wt%
Pt	29	58.8%
Cr	5	2.7%
Fe	65.5	38.0%
Mo	0.5	0.5%
nb	0	0.00%
Si	0	0.00%

	at%	wt%
Pt	28	57.3%
Cr	7	3.8%
Fe	63.5	37.2%
Mo	0	0.0%
nb	1.5	1.46%
Si	0.5	0.15%

	at%	wt%
Pt	25	53.9%
Cr	10	5.7%

Art Unit: 1742

Fe	64.5	39.8%
Mo	0	0.0%
nb	0.5	0.51%
Si	0	0.00%

Concerning instant claim 5, 58.8wt% Pt as taught by ex 4 of JP'141 is held to be within the scope of greater than *about* 60wt% Pt, likewise 2.7 is held to be within the scope of *about* 3wt% Cr.

Concerning instant claims 14-21, because the alloy taught by JP'141 falls within the presently claimed compositional ranges, then substantially the same properties, such as pitting resistance, hardness, UTS, density, phase structure, are expected to occur. Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a *prima facie* case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are inherently present.

Concerning claims 22 and 23, as stated above, JP'141 teaches said alloy can be implanted as a dental prosthesis.

Because JP'141 teaches examples of Pt alloys that fall within the presently claimed alloying ranges (and wherein said alloys are used for various medical devices, see above), it is held that JP'141 anticipates the presently claimed invention.

Art Unit: 1742

8. Claims 1, 4-9, 13-21 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 61-076634 (JP'634).

JP'634 teaches a Pt alloy used for medical equipment and accessories (see Derwent abstract), wherein said alloy comprises (in wt%): 0.1-5% Ru, 2-15% Fe, Cr, and Co (abstract). JP'634 further teaches an example with 2% Fe, 5% Cr, 3% Ru, and 90% Pt (see p 196, ex. e), which falls within the instant claim ranges (cl. 1, 4-9, 13).

Concerning claims 14-21, because the alloy taught by JP'634 falls within the presently claimed compositional ranges, then substantially the same properties, such as pitting resistance, hardness, UTS, density, phase structure, are expected to occur (see above discussion). Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are inherently present. Because JP'634 teaches examples of Pt alloys that fall within the presently claimed alloying ranges (and wherein said alloys are used for various medical devices, see above), it is held that JP'634 anticipates the presently claimed invention.

### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 5-7, 10-11, 14-21, 24-26 rejected under 35 U.S.C. 103(a) as being unpatentable over JP'141.

JP'141 is discussed in paragraphs above.

Art Unit: 1742

Concerning claims 5-7, JP'141 teaches broad ranges of: 17-37at% Pt, 0-25at% Cr, 38-83at% Fe; which are equivalent to: 41.7-67.8wt% Pt, 0-12.2wt% Cr, 19.9-58.3wt% Fe, which overlap the presently claimed alloying ranges (67.8 is held to be "about 70").

Overlapping ranges have been held to be a prima facie case of obviousness, see MPEP § 2144.05. It would have been obvious to one of ordinary skill in the art to select any portion of the range, including the claimed range, from the broader range disclosed in the prior art, because the prior art finds that said composition in the entire disclosed range has a suitable utility. Because JP'141 teaches an overlapping Pt-Cr alloy, it is held that JP'141 has created a prima facie case of obviousness of the presently claimed invention.

Concerning claims 10-11, JP'141 teaches that Ni can be present, in an amount of up to 25wt% (combined w Cr and Co, abstracts, [002]), which falls within the presently claimed range.

Concerning claims 14-21, the examiner asserts that where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. The prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. *In re Best*, 562 F.2d at 1255,

Art Unit: 1742

195 USPQ at 433. See also Titanium Metals Corp. v. Banner, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985), see MPEP 2112.01.

Concerning claims 24-26, though JP' 141 does not mention said biocompatible Pt alloy is in the form of the particular medical instrument or device substantially as presently claimed, it would have been obvious to one of ordinary skill in the art to form the Pt alloys taught by the prior art of JP'141, into a variety of instruments or devices used in the medical field (including clamp, needle, cutting element, etc.), because JP'141 teaches said Pt based alloy excellent in corrosion resistance and biocompatibility, and wherein the biological toxicity is eliminated due to presence of Pt (see Derwent abstract).

11. Claims 27, 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP'141 in view of "Metals Handbook Desk Edition", p 54, 362-365 (as a teaching reference).

JP'141 is discussed in paragraphs above. JP'141 teaches using said Pt alloy as a medical device, etc.

Concerning claims 27, 30, 31, JP'141 teaches broad ranges of: 17-37at% Pt, 0-25at% Cr, 38-83at% Fe and small amounts of C (see abstract, etc.); which are equivalent to: 41.7-67.8wt% Pt, 0-12.2wt% Cr, 19.9-58.3wt% Fe, which overlap the presently claimed alloying ranges (67.8 is held to be "about 70"). The instant claims are drawn to a an alloy comprising greater than 50wt% Pt and a stainless steel. The addition of a stainless steel to said Pt alloy is held to met by the addition of the (separate) components of a stainless steel, namely, Fe, Cr, and C (see "Metals Handbook Desk Edition", p 54). Additionally, the examiner points out that the instant claim does not specify a ratio of said components nor does said claim contain closed claim language (excluding excess Cr or Fe, beyond the ratio typical of a stainless steel etc.). Because JP'141

Art Unit: 1742

teaches an alloy that comprises said components, wherein said Pt alloy is additionally used as a medical device, it is held that JP'141 has created a prima facie case of obviousness of the presently claimed invention.

Overlapping ranges have been held to be a prima facie case of obviousness, see MPEP § 2144.05. It would have been obvious to one of ordinary skill in the art to select any portion of the range, including the claimed range, from the broader range disclosed in the prior art, because the prior art finds that said composition in the entire disclosed range has a suitable utility.

Concerning claims 32, JP'141 teaches that Cr is present (abstract, etc), as well as up to 25at% Mo (abstracts, [002]), which falls within the scope of the instant claim.

Concerning claims 33, the examiner asserts that where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established (see above discussion). If the prior art teaches the identical chemical structure, the properties applicant discloses (such as phase structure) and/or claims are expected to be present.

12. Claims 14-21, 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP'634.

JP'634 is discussed in paragraphs above.

Concerning claims 14-21, the examiner asserts that where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA

Art Unit: 1742

1977). Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present, see discussion above, MPEP 2112.01.

Concerning claims 24-26, though JP'634 does not mention said biocompatible Pt alloy is in the form of the particular medical instrument or device substantially as presently claimed, it would have been obvious to one of ordinary skill in the art to form the Pt alloys taught by the prior art of JP'634, into a variety of instruments or devices used in the medical field (including clamp, needing, cutting element, etc.), because JP'634 teaches said Pt based alloy can be used in medical equipments and accessories (Derwent abstract).

13. Claims 1, 3-7, 13-26, 41,44-47, 51-59 are rejected under 35 U.S.C. 103(a) as being obvious over Matsui et al (US 5,161,972).

Matsui teaches a Pt alloy for dental prosthesis (column 7 lines 25-27, 47-56) said alloy comprising: 33-47at% Pt, 0.1-10at % Cr, Mo, 43-66.9at% Fe (column 7 lines 48-56); which converts to approx. 63.2-75.8wt% Pt, 0.1-4.3wt% Cr, Mo, 19.9-36.7wt% Fe, which overlaps the presently claimed ranges of Pt, Cr, Mo, and Fe (cl. 1, 3-7, 13, 41, 44-47, 51).

Concerning claims 14-21, 52-59, as stated above, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are expected to be present, see discussion above, MPEP 2112.01.

Concerning claims 22 and 23, Matsui teaches said alloy is formed into a dental prosthesis (column 7 line 26).

Concerning claims 24-26, though Matsui does not mention said biocompatible Pt alloy is in the form of the particular medical instrument or device substantially as presently claimed, it would have been obvious to one of ordinary skill in the art to form the Pt alloys taught by the

Art Unit: 1742

prior art of Matsui, into a variety of instruments or devices used in the medical field (including clamp, needing, cutting element, etc.), because Matsui teaches said Pt based alloy has very high corrosion resistance (column 3 lines 41-42, see also examples) when used in a biocompatible environment.

***Allowable Subject Matter***

**14.** Claims 28 and 29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**15.** Claims 35 and 36 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

**16.** The prior art does not teach or suggest the particular addition of a 300 or 316 stainless steel to a platinum alloy with >50wt% Pt (see prior art of record, "Metals Handbook Desk Edition" for known 300 type stainless steels), substantially as set forth in instant claims 28 and 29. Additionally the prior art does not teach or suggest an alloy with >50% Pt that "consists essentially of" a stainless steel, Cr, and Mo (instant claim 35).

**17.** Claims 12 and 50 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The closest prior art, JP'141 (see also "ASM Handbook: Vol 2"), does not teach or suggest a Pt alloy complete with the presently claimed alloying elements, substantially as set forth in claims 12 and 50.

Art Unit: 1742

18. Claims 48 and 49 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The closest prior art, Matsui, does not teach or suggest a Pt alloy complete with the presently claimed ranges of Pt, Cr, Mo and further containing Fe and Ni, substantially as set forth in claims 48 or 49.

***Response to Amendment/Arguments***

19. In the response filed on May 25, 2005, applicant amended claims 27, and submitted various arguments traversing the rejections of record.

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn (in particular, applicant argued the rejection of claim 41, which was previously amended to include the features of claim 43, and newly rejected by JP'339, was improper).

20. Applicant's arguments with respect to pending claims have been considered but are moot in view of the new ground(s) of rejection.

21. Applicant's argument that the present invention is allowable over the prior art of record because the prior art does not mention various elements such as Ni, Cu, Mn, P, etc. are present has been found persuasive (see "Metals Handbook: Desk Edition" for background on Pt alloys, etc.).

Art Unit: 1742

***Conclusion***

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janelle Combs-Morillo whose telephone number is (571) 272-1240. The examiner can normally be reached on 8:30 am- 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JCM  
  
June 22, 2005

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